

We claim:

1. A preparation possessing antiviral activity comprising substances obtained from cuticular or epicuticular layers of a plant or plant part.

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2. The antiviral preparation of claim 1 wherein the plant is of one or more species selected from the group of genera consisting of *Malus*, *Pyrus*, *Vita*, *Citrus*, *Lycopersicon*, *Brassica*, *Cucumis*, *Prunus*, *Persea*, *Vaccinium*, *Arctostaphylos*, *Olea*, *Nicotianum*, *Quercus*, *Eucalyptus*, *Rhododendron*, *Ilex*, *Eriobotrya*, *Salix*, *Copernicia*,
10 *Euphorbia*, *Pedilanthus*, *Syagrus*, *Cocos*, *Attalea*, *Stipa*, *Glyceria*, *Saccharum*, *Myrica*, *Rhus*, *Sapium*, *Ceroxylon*, *Linum*, *Agave*, *Cannabis*, *Raphia*, *Coccus*, *Ligustrum*, *Fraxinus*, *Benincasa*, *Ricinus*, *Buxus*, *Mesembryanthemum*, *Rubus* and *Melaleuca*.

3. The antiviral preparation of claim 1, which comprises one or more
15 constituents selected from the group consisting of waxes, plant wax components, cutins, terpenoids, triterpenoids, phenolics, primary alcohols, secondary alcohols, hydrocarbons, diketones, fatty acids and flavanoids,

4. The antiviral preparation of claim 1 wherein the antiviral activity is
20 effective against a virus selected from the group consisting of human immunodeficiency virus, herpes simplex virus, other herpesviruses, influenza virus, rhinovirus, poliovirus, hepadnaviruses, cytomegalovirus, measles virus, parainfluenzavirus, vesicular stomatitis virus, vaccinia virus, encephalitis virus, and African Swine Fever virus.

25 5. A method for producing a preparation possessing antiviral activity comprising substances obtained from cuticular or epicuticular layers of a plant or plant part, the method comprising:

a) exposing the plant or plant part to a solvent under conditions sufficient to solubilize materials in the cuticular and epicuticular layers of the plant, while leaving cells and tissues internal to the epidermis substantially unaffected, thereby obtaining a
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solution or suspension of plant cuticular and epicuticular materials; and, optionally,

b) removing the solvent, thereby producing the antiviral preparation.

5 6. The method of claim 5 wherein the solvent comprises one or more ingredients selected from the group consisting of hexane, chloroform, dichloromethane, heptane, ether, petrolether, t-butyl ether, DMSO, supercritical fluids and carbon dioxide.

7. The method of claim 5 wherein the step of exposing comprises dipping the plant or plant part into the solvent.

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8. The method of claim 5 wherein the step of exposing comprising spraying the plant or plant part with the solvent.

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9. The method of claim 5 wherein the removal of the solvent is performed by a method selected from the group consisting of aspiration, static evaporation, heating, centrifugal evaporation, rotary evaporation, vortex evaporation, lyophilization, liquid-liquid separation, solid-liquid separation and precipitation.

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10. An antiviral preparation prepared by the method of claim 5.

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11. A pharmaceutical formulation for treating a viral disease, which comprises an antiviral preparation of plant cuticular and epicuticular substances and a pharmaceutically compatible delivery system.

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12. The pharmaceutical formulation of claim 11, formulated for administration by a route selected from the group consisting of topical, oral, nasal, pulmonary, ophthalmic, aural, rectal, urogenital, subcutaneous, intraperitoneal and intravenous.

13. The pharmaceutical formulation of claim 12, formulated for topical

delivery, wherein the delivery system is selected from the group consisting of: balm, ointment, cream, powder, roll-on liquid and spray.

14. The pharmaceutical formulation of claim 12, formulated for oral
5 delivery, wherein the delivery system is selected from the group consisting of food, candy, gum, beverage, tablet, suspension, solution, colloid and capsule.

15. A method for treating a viral disease in a patient in need of such
treatment, comprising administering to the patient a dose of the pharmaceutical
10 formulation of claim 11 effective to reduce or eliminate the viral disease or symptoms of the viral disease.

16. A nutraceutical formulation comprising a preparation of plant
cuticular and epicuticular substances having antiviral activity.

15 17. The nutraceutical formulation of claim 16 wherein the plant is an edible species.

18. The nutraceutical formulation of claim 15 wherein the formulation is
20 selected from the group consisting of food, candy, gum, mint, breath freshener, health bar, beverage, herbal supplement, dietary supplement, vitamin, tablet, suspension, colloid and capsule.

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